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March 2001

Danthonia

NEWSLETTER OF THE AUSTRALIAN NETWORK FOR PLANT CONSERVATION INC

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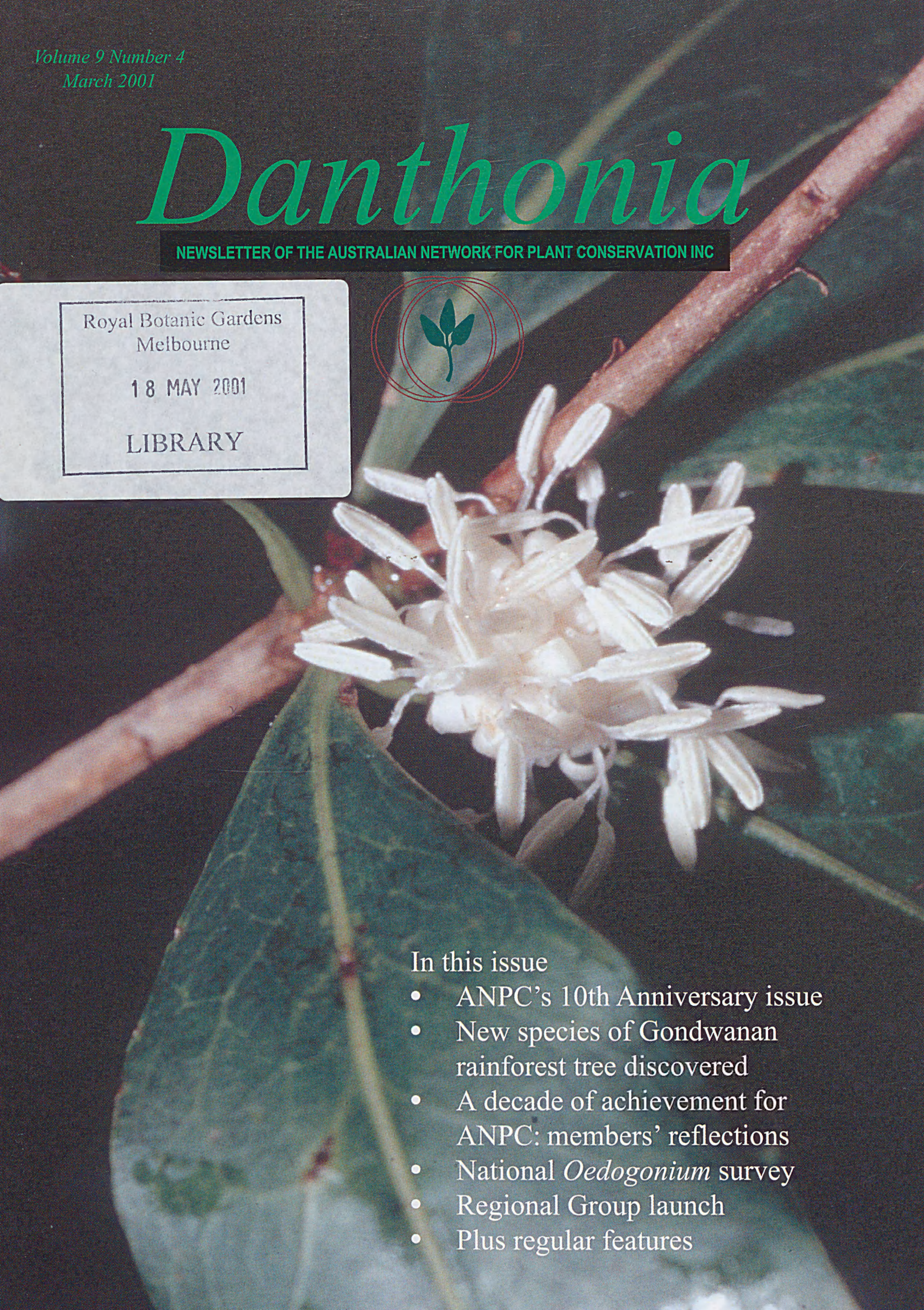

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- National *Oedogonium* survey
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Danthonia

Editors

Rosie Smith
Jeanette Mill

With thanks to Barry Brown, Emma Lewin, Andrew Lyne, Bob Makinson and Lyn Meredith

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ANPC Inc. Mission Statement

"To promote and develop plant conservation in Australia."

Contributing to *Danthonia*

Danthonia is a forum for information exchange for all those involved in plant conservation: please use it to share your work with others. Articles, information snippets, details of new publications and diary dates are all welcome. The deadline for the June 2001 issue is Tuesday 15th May, 2001.

Please send typed or handwritten articles, no more than 2 A4 pages, to Jeanette Mill by fax, mail, e-mail, or diskette. If sending by e-mail, please send in the body of the text or as an attachment in Word or Rich Text Format (rtf) to: anpc@anbg.gov.au

Illustrations or logos are always needed too, in the form of clear prints, slides or drawings.

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Gondwanan tree discovered in the Nightcap Range

Dianne Brown, Threatened Species Officer, NSW National Parks and Wildlife Service

In the far north-east of New South Wales, the discovery of a new member of the Proteaceae family has created much excitement in the botanical world and beyond. Dubbed the Nightcap Oak, *Eidothea* sp. nov is a tall tree that occurs in the rainforest of the Nightcap Range.

Fruits of the Nightcap Oak

Photo: Dianne Brown

The discovery of the Nightcap Oak was a slow process, beginning in 1875 in Victoria. A fossil of a tree found near Ballarat was first described by botanist Baron Ferdinand von Mueller as *Xylocaryon lockii*. Then, nearly one hundred years later in the 1960's, renowned botanist Bernie Hyland found similar fruits on the rainforest floor on the flank of Mount Bartle Frere in far north Queensland. It took him 20 years to finally locate the trees that produced the fruit to allow final identification, which were formally described in 1995. These trees were placed in the Proteaceae family in the genus *Eidothea* (it is very closely related to the Nightcap Oak). The species has been named *zoexylocarya*, due to many similarities with the fossil plant found in Victoria.

Then in the late 1980's, NSW north coast botanist Rob Kooyman found leaves from a young plant in the Nightcap Range that he could not identify. Specimens returned from the herbarium placed the leaves tentatively in the genus *Corynocarpus*, however, without any further material such as flowers or fruits, it was impossible to more accurately describe the species.

The mystery remained unsolved until late in 2000 when Rob was once again working in the Nightcap Ranges with colleague Andrew Benwell, when more individuals were found, including some that were large rainforest canopy trees. When Rob took a small sample of woodfromone of the trees, it showed the familiar oak flecking which is characteristic of the family Proteaceae. Further searching located nuts from the trees, which displayed remarkable similarities with the fossil nut from Victoria, and the nuts from the Mt Bartle Frere trees. By now, Rob was convinced that he was looking at a new species of Proteaceae.

The Nightcap Oak has not yet been ascribed a species name, but is currently being formally described by Proteaceae specialist Peter Weston at the NSW National Herbarium, assisted by Robert Kooyman. Fortuitously, some of the trees flowered shortly after discovery, which will assist with the formal description of the taxa.

Eidothea foliage
Photos: Dianne Brown

Description, habitat and population

The Nightcap Oak grows in simple notophyll vine forest (warm temperate rainforest) on rhyolite geology. The Nightcap Range is renowned for its World Heritage rainforests, high biodiversity, and particularly its large number of rare, threatened and significant plants and animals.

The largest Nightcap Oak measures 40m in height, and has a diameter at breast height of 75cm. The juvenile leaves have persistent spiny teeth, while the adult leaves have entire margins. The fruits are woody with ribs intruding into the seed, similar to a walnut. The flowers are a creamy white with a mildly aniseed scent. The tree often has a suckering growth habit, similar to the Antarctic Beech that also grows nearby in the Border Ranges.

The trees are only known to occur within one catchment of the Nightcap Range, and are scattered across a few hectares. The only other member of the *Eidothea* genus occurs in far north Queensland and has a restricted distribution.

After extensive searching for further populations, the current population size is approximately 27 adult trees, with a number of juveniles including seedlings and suckering plants.

Evolutionary history

Proteaceae is an ancient Gondwanan plant family. Members of the Proteaceae family are among the first flowering plants that appear in the Australian fossil record during the Cretaceous period, over 60 million years ago. The flowers of the Nightcap Oak have characteristics far more primitive than many other members of the family, indicating that it has an evolutionary history stretching far into the past.

Along with the fossil relative found in Victoria and the *Eidothea* in far north Queensland, the discovery of the Nightcap Oak provides additional evidence that southeast Australia was once covered in rainforest.

The Nightcap Oak represents one of the families from which much of the modern, dry-adapted Australian flora such as the Banksias and Grevilleas, evolved and as such may provide important information to assist with the reconstruction of the evolution of Australia's flora.

Media interest

Naturally, comparisons were made early on in the discovery to the finding of the Wollemi Pine in Wollemi National Park. This subsequently attracted considerable media attention including national and international radio, newspapers and television.

Although it is important to publicise a new and exciting botanical discovery, it is essential that this attention does not expose the Nightcap Oak to any potential threats. Now that the media interest has died down, NPWS is concerned to keep the location of the plants confidential to prevent any trampling, illegal collection or vandalism, or the accidental introduction of pests and disease.

Conservation planning

One of the most important actions now to protect the Nightcap Oak is to keep the location of the trees confidential for reasons mentioned above. A site visitation protocol similar to that developed for the Wollemi Pine will need to be developed. This will aim to control access to authorised personnel such as researchers and land managers.

Management will also be required to ensure that the trees are protected from a natural disaster such as fire. The species will also need to be protected from any direct or indirect impacts of logging such as sedimentation or exposure.

In recognition of the significance of the Nightcap Oak, the NSW Scientific Committee is considering an emergency listing of the species as Endangered under the NSW *Threatened Species Conservation Act, 1995*. If the Nightcap Oak is listed the National Parks and Wildlife Service will be required to develop a Recovery Plan for the species. The Recovery Plan will aim to ensure that the Nightcap Oak and its habitat is protected from threatening processes by outlining the actions needed to ensure its long term survival in the wild.

Ex situ conservation of the species will also be investigated, including the collecting of seeds and cuttings for growing in a botanic garden. This will ensure that, if any catastrophic event kills the trees growing in the wild, the species will not be lost forever and may be reintroduced to the site.

A Recovery Plan will also outline the development of a research plan. The research plan will investigate the species' ecology such as its habitat, life cycle, pollinators, dispersal mechanisms and genetics.

For further information on the Nightcap Oak please contact Dianne Brown at the Threatened Species Unit, NPWS Northern Directorate, Coffs Harbour 2450
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A Decade of Achievement for the Australian Network for Plant Conservation

Dr Kingsley Dixon, President, ANPC Inc
Director, Science, Botanic Gardens and Parks Authority, West Perth

A decade on and the Australian Network for Plant Conservation stands out as one of the leading examples of plant conservation networks in the world. This is no small feat and is testimony to the devotion, passion and belief of members and the Executive in the need to progress plant conservation in Australia. Now on the eve of the next decade for the Network and at the beginning of the new millennium we can reflect on the past achievements and build on these strengths as we face the new challenges ahead.

Since the inception of the ANPC back in 1991 when founders Mark Richardson, Lyn Meredith and Geoff Butler resolved to formulate a network to advance improved plant conservation, the Network has steadily grown in strength.

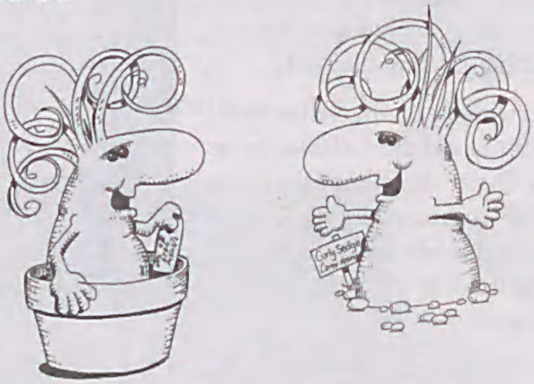
ANPC Founders Lyn Meredith, Mark Richardson & Geoff Butler, talking with Ben Wallace

Proudly the ANPC now stands as one of the most respected community integrated and comprehensive plant conservation networks in the world. Taking the lead from the American model, the Center for Plant Conservation now based in St Louis, Missouri, the ANPC quickly asserted a role in ground-up plant conservation.

Today the ANPC comprises 420 members with over three quarters from regional backgrounds or who represent regional land management responsibilities. Unlike most other plant conservation bodies, the ANPC prides itself in having membership where the plant conservation action is – in regional Australia. In the last 3 years, 80% of the conservation activities of the Network have occurred at the regional level where local communities have benefited from the shared information, practical guidance and direct, hands-on action provided by the Network.

A remarkable feature of the ANPC is the wide representation of community, non-government organisations, industry and government bodies. This rich and diverse membership ensures that members have the best opportunity for cross-fertilisation of ideas and practice, which has resulted in many outstanding achievements.

Undoubtedly one of the remarkable outcomes of this diversity of members is the biennial conference. For those that have attended they remain as cornerstones for networking and learning, with partnerships and benefits flowing long after the meetings have concluded. The success of the first conference in Hobart in 1993 led the way in developing cross-discipline meetings of conservation practitioners, and this meeting became the hallmark for all other ANPC meetings. Coffs Harbour, 1997 and Albury 1999 carried on with the enduring tradition established in Hobart, and with the next scheduled in Geelong or Melbourne, there is no doubt that these meetings are the barometer of the success of the ANPC.

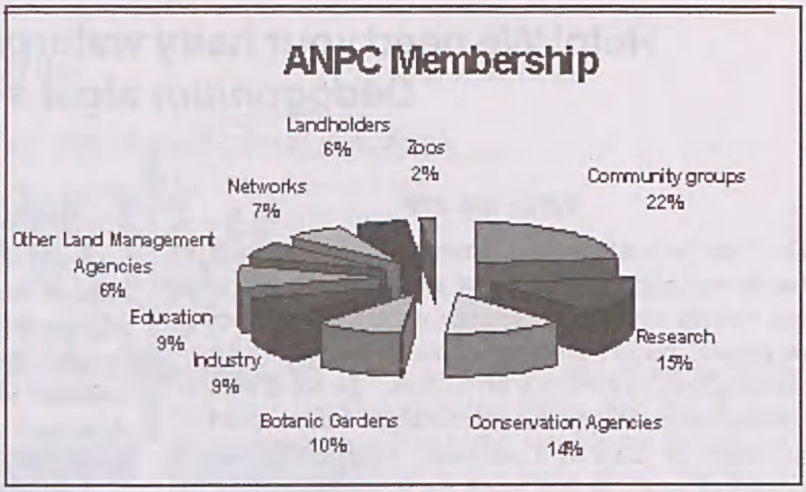


Curly Sedge, mascot of the first ANPC conference in Hobart. Illustraions by Andrew Smith.

Between the conferences the hard-working membership and staff have achieved an impressive record of conservation benefits for the nation. Besides the thousands of hours of voluntary support provided by the Network, and advisory support to landholders and community conservation organisations, the Network has guided best practice in recovery of threatened plant species, worked on conserving rare orchids and provided training in monitoring methods in rare plants. Field days, and an impressive 500 community conservation practitioners trained through, among other things, the

(continued from page 5)

ongoing conservation techniques course add to the list of achievements by the Network.



The national and international standing of the Network has grown substantially and endorses the leading role that the ANPC plays in practical plant conservation. Through the Executive, the ANPC is now represented at all major international plant conservation conferences and provides specialist advice to international organisations such as the IUCN and Botanic Gardens Conservation International on plant conservation in the region, and presses for international recognition of the unique issues facing conservation of Australia's plant biodiversity.

Danthonia, the quarterly publication of the ANPC is firmly established as a key link in sustaining the activities of the Network. Circulated to over 900 members and affiliated organisations, *Danthonia* strives to distil the practical benefits of conservation research and new practises from across the nation. Members can now also access the website of the Network, and the strategic links that have been built into the webpage provide a quick and reliable source of information on conservation matters.

The fact that all of this and more are achieved with just 1.5 positions based in the Canberra office is testimony to the diligence and passion of the staff, volunteers and members who keep the Network working. As we face the next decade let us strive to grow the Network from strength to strength. Your support as a member is the foundation for the success of the Network and the continuation of our conservation activities. Our unique plant heritage deserves the ANPC and your support.

Threatened Species Network Community Grants Program: 2001 Funding

Fifteen NSW community groups have good reason to be pleased, following the allocation of $150 000 to fund threatened species and ecological community conservation work in 2001. A national total of $505 000 has been awarded to 48 projects in Australia, and the NSW funding will hopefully address some important conservation issues. Included in the NSW projects are plans to restore Onionwood (*Owenia cepiodora*) habitat, conservation of lowland rainforest, Greybox and Whitebox woodland regeneration, management of natural temperate grasslands and a project to conserve Hygrophoracaea fungal communities.

The Bogong Alliance in Victoria also received funding for the restoration of degraded alpine mossland plant communities, and a group in Melbourne will step up efforts to protect a population of the Small Scurf Pea (*Psoralea parva*) from housing pressure.

The next funding round applications for the Threatened Species Network Community Grants Program opens in April, and continues until June. Any group interested in undertaking threatened species / habitat / community conservation projects should look up the TSN website on http://www.nccnsw.org.au/member/tsn/ for state coordinator contact details.

(*Source*: 'The Web' Newsletter of the Threatened Species Network NSW and VIC, Dec 2000).

Call for volunteers: Latz's wattle monitoring project

Assistance is needed for the ongoing monitoring of the endangered Latz's wattle (*Acacia latzii*), which was first recorded in 1974 by Peter Latz. Latz's wattle is known in only two locations in the Northern Territory and Southern Australia, occurring around creeks and low-lying hills.

Excursions are under way to look at recruitment rates and seed set, and volunteers are required until May. If any ANPC members in the Northern Territory would like to participate, please call Colleen O'Malley on (08) 8952 1541.

(*Source*: 'The Web' newsletter of the Threatened Species Network NT January 2001, also TSN online)

Help! We need your hairy waterplants: Nationwide *Oedogonium* algal survey

Dr Stephen Skinner, Royal Botanic Gardens Sydney

Who we are

Dr Tim Entwisle is well known for his interest in freshwater algae, especially of streams and rivers. He has written numerous scientific papers, and a number of popular pieces, prominent among which is the eye-opening *Freshwater Algae in Australia.* Dr Steve Skinner worked on marine and freshwater algae before spending a number of years as a secondary teacher. In the last couple of years he has taken the opportunity to work again on freshwater algae, with Dr Entwisle, at the Royal Botanic Gardens in Sydney.

What we are interested in

We have a grant from the Australian Biological Resources Study (ABRS) to review the Oedogoniales, with emphasis at this point on *Oedogonium*, within the Australian flora. These green filamentous algae are common in many aquatic systems throughout the country, but have been poorly collected. Mroziñska accepts 465 species of *Oedogonium*, 15 species of *Oedocladium* and 113 species of *Bulbochaete* in her recent monograph of the Order for the *Süßwasserflora von Mitteleuropa* (1984). Present Australian records suggest that between a quarter and a third of these may be represented in our waters. Endemism is a feature of these genera in other parts of the world, but we have little indication of the extent of endemism in our flora at this stage.

What we would like you to send us

We would like samples of submerged or emergent plants from swamps, garden ponds, dams, drains and transient waterbodies like water meadows and seepages in your area. We are after the ones on which the submerged parts are all furry with green stuff. Some of the favourites with *Oedogonium* and *Bulbochaete* are *Chara*, *Myriophyllium*, *Elodea* and its relatives and *Vallisneria*, but many others go hairy too!

Where you look for *Oedogonium* and friends

Oedogonium and *Bulbochaete* are epiphytes, common on many submerged and emergent aquatic plants from stoneworts, upon which they thrive, through water mosses and ferns to particularly herbaceous flowering plants. *Oedocardium* is a less common alga, sometimes encountered at the fringes of waterways and on the faces of waterfalls, or on damp soil.

How you tell them from other hairy fringes on aquatic plants

Most of the time they form glassy green or yellow fur on their hosts, but they often become part of a more complex fringe together with *Lyngbya* and *Scytonema* (common blue-green epiphytes), as well as other green algae such as *Mougeotia*, *Stigeoclonium*, *Cladophora* and many different kinds of diatoms. When there are many diatoms present, the fur can look very rusty brown, and tends to wash off easily. If the blue-greens dominate then things can look slimy and bottle green, khaki or purplish black.

What are my chances of finding fertile material?

Usually quite good! Except for collections from flowing water systems, at least some of the plants will show some stages of reproduction. This means that upon reporting back, most of the time we will be able to reward you with at least some names.

What implications has this work got?

We don't know at this stage. Because previous work has been scattered in approach, and usually included in more general work, we cannot be certain of the floristics of most areas. That is part of the importance of the present work. As these are algae of billabongs and other seasonal water systems, there is a likelihood that there may be interesting associations of species that will come to light going on what has been found with studies of invertebrate groups in the past. As these algae probably provide food sources for such organisms, it seems probable that such will be the case, but we won't know until we have the data.

How the specimens can be delivered to us

Where people are tooled up to collect aquatic material, it is preferable that host material is preserved in 4% formalin. As this is not often the case there are two alternatives. Host material can be drip-dried, and transferred to snaplock plastic "lunch-bags" and posted fresh to us. Alternatively, host material can be shaken dry, transferred to tightly capped bottles together with a little alcohol or methylated spirit, or even Lugol's Iodine, and forwarded to us. If the Post Office does it's job, specimens usually arrive in good order.

(Continued from page 7)

What information we need with the specimen

We need locality details, such that the particular body of water containing the specimens could be located again. Where the latitude and longitude is known this is most helpful in pinpointing locality. We need details about the host : i) how common, ii) what sort of water depth it was in, iii) what other plants were growing there with it, and iv) if the water body was permanent or seasonal, still or sluggish or fast flowing. Was the substrate muddy, sandy or rocky, and the water clear, muddy or positively murky ? . We need the date of collection and the collector's name, and if the collection is part of a survey or an exchange from another institution, the collector's number for the sample.

Our Address

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Editor's note:Whilst we applaud any efforts to sample and study the Oedogoniales, please note that in some cases a permit may be required. It is advised that anybody wishing to participate in this study should contact the relevant authorities in their area before collecting any vegetation.

Ten Years On: A Floral Tribute

Associate Professor David Given, Vice President, ANPC Inc
Chair, IUCN Species Survival Commission Plant Conservation Sub Committee
Christchurch, New Zealand

Ten years - time to reflect and to ask, 'is it really ten years on?'. It has been a challenging ten years and an important decade as the case for conservation of plant diversity has grown more urgent and as the science of conservation biology has matured. It has also been a decade when new structures have developed in answer to the needs both globally and locally.

As part of this I believe that we are realising that there is a need for much closer synergies between academics, scientists, planners and those working on field projects. Much of the emphasis is now not only on good conservation which is based on defensible scientific criteria, but on communication and liaison, and especially the continued interaction between science and research.

ANPC plays an interesting, and perhaps in some quarters, an undervalued role, in this. It is first of all a network, linking widely differing organizations and individuals as partners for a common cause. As such it is not so much a sectoral pressure group as a consensus-building body. It has provided a model for other networks, whilst recognising that networks elsewhere will have their own unique features. It is a communication and communicating organization, and I believe that its role as an advocacate for the Australian (and New Zealand) flora as been considerable but also has potential to grow. As has been said elsewhere, 'Who will speak for the flowers; if not now, when?'.

ANPC has also developed as a training and facilitating organisation, something which the Plants Programme of the IUCN Species Survival Commission has recognised as a priority globally. Its workshops are invigorating and a fascinating and effective mix of the practical and the theoretical. There is much to build on here, especially the concept of master workshops and development of further training manuals. I note that in recent months we are starting to see a significant number of enquiries coming from people - 'how do I do this or that?', and this suggests the need to develop an expert service for enquiries on the practicalities of plant conservation and habitat restoration. But, the network depends on members. Networks service members but it is the enthusiasm, knowledge and dedication of members that keeps them alive. Thinking globally and acting locally, perhaps this could be rephrased as a 'top down and bottom up' approach, as I and many others toast 10 years of achievement and look forward to the next ten years of progress.

New Director for Australian National Botanic Gardens

Robin Neilsen, Director, Australian National Botanic Gardens, Canberra

Since my appointment as Director of the ANBG in October 2000, I have enjoyed becoming more familiar with the work of the Gardens and the ANPC in enhancing plant conservation in Australia.

As a child growing up in Tumut, NSW, I came to love the Australian environment both as natural bushland and the cultivated landscape around me. I was helped in this by the fact that my father was a forester in Tumut - trees and other plants were a constant part of my life. I continued this interest by studying forestry myself in Canberra during the 1970s.

My work has largely focussed on managing environmental resources in the ACT. I worked as a forest manager with ACT Forests from 1982 to 1989. In 1990, I became Operations Manager for City Parks, where I was responsible for managing horticulture operations and tree management. This was followed by a brief stint as Manager of ACT Agriculture and Landcare, with responsibility for agricultural land management and animal welfare issues. In 1994, I became Manager of the ACT Government Sport and Recreation Facilities Program, which included management of Canberra's extensive public sportsground system.

In late 1998 I left ACT Government and returned to the Australian National University to undertake a Masters degree in Environment Science, which I completed in early 2000. In the research component of that course, I focussed on sustainable development and the impact of the NSW Native Vegetation Conservation Strategy, with its emphasis on saving remnant native ecosystems in rural NSW.

This last phase of my training, together with my experience in managing environmental and recreational resources, helped prepared me for my current job. The Gardens represents an outstanding resource for conservation, especially the promotion of the need to conserve natural resources. The Gardens unique blend of scientific research and living collections enables us to develop and spread knowledge about Australian flora to the broad community and assist in many aspects of environmental decision-making. The Gardens remains a strong supporter of the goals of the ANPC and I look forward to continuing to work with the organisation in the future.

New Resources for WA Endangered Flora

Conservation and Land Management (CALM) in Western Australia have produced a number of high quality online resources that can be utilised for both educational and research purposes. One of these is a series of critically endangered flora posters which are available for downloading, complete with historical, biological and conservation action information.

Of the ninety five critically endangered flora species in WA, thirty of them are featured, including the rare Chiddarcooping myriophyllum (*Myriophyllum busselliana*), a plant that inhabits rock pools on granite outcrops, as well as Maxwell's Grevillea (*Grevillea maxwellii*), of which there are only five small known populations in the wild.

Also featured is the CALM Florabase, developed by the Western Australian Herbarium. The database covers Western Australian flora, and there is no registration required. Database results are well presented with the user able to extract images, distribution and taxonomic information to the required level of detail relatively quickly.

To access these resources online, see:

- Endangered flora posters: www.calm.wa.gov.au/plants_animals/critical_flora.html
- CALM Florabase: www.calm.wa.gov.au/science/florabase.html

*One of the featured endangered flora, Silky Eremophila (*Eremophila nivea*). Photo: Andrew Brown, CALM*

Australian Network For Plant Conservation Illawarra and South Coast Regional Group

It is timely (in honour of the 10th anniversary of the network) to form a new regional group under the ANPC for the New South Wales South Coast and Illawarra region. It is proposed to hold a formative meeting at the Wollongong Botanic Garden 'Discovery Centre' in order to establish our group as well as discuss future directions.

At: Wollongong Botanic Garden Discovery Centre, Madeline St. Gwynneville

Commencing at 11am (*lunch, tea.& coffee provided*) on:

Sunday 8 April 2001

Proposed Agenda:

Introduction to ANPC (Jeanette Mill, ANPC)

Regional Partnerships (Jeanette Mill)

Threatened Species Conservation in our region (Chris Lacey, NSW NPWS)

Role of Wollongong Botanic Gardens in plant conservation (Jason Brown, Wollongong City Council)

Future Directions (Paul Formosa, Natural Areas Coordinator, WCC)

Tour of Wollongong Botanic Gardens

The experiences of the ANPC's existing regional groups indicate the key role for networking to ensure best practice and strong partnerships for plant conservation at the regional level. This meeting is to hopefully establish our group's direction and focus and warmly invites interested individuals and organisations to participate in a regional approach to plant conservation.

Contacts:	Paul Formosa Ph:	4225 2638	Email: pformosa@wollongong.nsw.gov.au
	Jason Brown Ph:	4225 2637	Email: jbrown2@wollongong.nsw.gov.au
	Roger Hart Ph:	4442 1122	Email: roger.hart@ea.gov.au

Drafts for Public Comment

Reform of Natural Resource Management in WA

A Working Paper, prepared by the Law Reform Working Group, following a round table discussion held in September 2000.

This reform is designed to address key issues arising from an identified need for widespread legislative reform in WA, and the following areas will be subject to consideration:

i) Promoting ecologically sustainable development
ii) An administrative framework for better natural resource management
iii) A duty of care for the environment
iv) Rights and responsibilities of traditional owners
v) Regional natural resource management groups
vi) Accountability and public participation

Input to, and comments on this working draft are requested, by post, e-mail or through the website: http://www.edo.org.au/edowa/EDOWA.htm
or e-mail: edowa@edo.org.au

Postal address: EDO Office, 1st Floor,
Law Society House,
33 Barrack Street,
Perth WA, 6000

Tel: (08) 9221 3030 Fax: (08) 9221 3070

(*Source: The Web, Newsletter of the Threatened Species Network WA, Feb 2001)*

Contributions to Biodiversity Action Plan for Botanical Gardens & Arboreta in Canada

Contributions welcome from anybody interested, the project welcomes comment on the Draft Action Plan, located at: http://www.rbg.ca/cbcn/bap
An interactive forum has also been set up, on: http://inetsrv.tetranet.net:8080/~CBCN
To participate in the Forum, please send a note to dgalbraith@rbg.ca or cbcn@rbg.ca to request a password.
(Canadian Botanical Conservation Network, Royal Botanical Gardens, Ontario, Canada)

10 Years of the ANPC: A retrospective in pictures and words

National Coordinator's Report

Jeanette Mill, ANPC

In this, the 10th Anniversary issue of Danthonia, our President, Vice-President, and regional coordinators have provided their reflections on the last decade of the ANPC, and we at the National Office have put together a photographic retrospective.

My most memorable moments with the ANPC have been when I have met and worked with members on ANPC activities. Also, when I have been out spreading the word to groups from the local to the international level, and have received such warm and encouraging feedback about the work of the ANPC. I constantly receive positive comments about Danthonia, and also the ANPC's strength in drawing together such a wide range of stakeholders from community, industry and government.

I continue to be amazed at the amount of in-kind support that the network receives from such staunch supporters as the Australian National Botanic Gardens, the voluntary regional coordinators and their hosting organisations, conference and course hosts, presenters and committees, working groups which have produced the very important germplasm and translocation guidelines, Danthonia article authors, office and regional group volunteers, the Advisory Committee (now replaced by the ANPC Committee), and last but not least, the ANPC Committee. As the ANPC has only 1½ paid staff, the achievements of the network would not have been possible without this tremendous input from members.

Funding support is crucial to enable the ANPC to maintain a National Office and draw in the above expertise and energy, and the Endangered Species Program of Environment Australia has been a vital source of support, along with membership fees, donations and sponsorships.

I would like to also join with others in thanking the visionaries who established the ANPC, Mark Richardson, Geoff Butler, Lyn Meredith. Also Peter Wyse Jackson of Botanic Gardens Conservation International, and Don Falk, who was at the time with the Center for Plant Conservation in the US.

It is timely that in our 10th anniversary year a new regional group should be created. Members from the south coast of NSW, Paul Formosa and Roger Hart, are working together to establish ANPC regional networking in their area.

Thanks to support from the NSW Environment Protection Authority, this year will see an emphasis on the ANPC training program. The Training Committee is working on plans for a Conservation Techniques Course as an 8-10 day intensive course or modules, plus a series of Master Workshops and a training manual.

Keep on networking, because the whole really is greater than the sum of the parts.

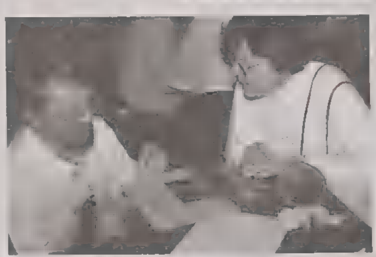
continued on the back page...

Left: L-R, Jeanette Mill, ANPC, David Given, ANPC Vice-President & Wendy Strahm, IUCN Plants Officer.

IUCN Species Survival Commission Plant Conservation Subcommittee. Back left: Craig Hilton-Taylor, IUCN Red List Officer, David Given, Chair of the Plant Conservation Subcommittee. Front left: Jeanette Mill, ANPC.

1999 ANPC Conference, Albury

Right: Field trip to Kosciuszko N.P.- Roger Good explains a long-running revegetation program to delegates.



Left: Heino Lepp with Fungimap volunteer Margery Smith during a Fungimap workshop.

Right: David Given (Vice President, ANPC) gives a workshop on flora monitoring.

Left: ANPC President Dr Kingsley Dixon presenting an ANPC Silver Sponsor Award to Frank Howarth (Director, RBG Sydney).

Right: Subtropical regional group learning about conservation initiatives of Brisbane Botanic Gardens, Mount Coot-tha.

ANPC Conservation Techniques Courses

Right: Field trip to CSIRO Wildlife & Ecology (1995, Canberra). R: Dr Jill Landsberg demonstrating research into effects of watering points on ephemeral vegetation on rangelands.

Left: Learning survey techniques for Allocasuarina dinosaurensis *(1998, Tasmania).*

L-R:, Mark Richardson (Alice Springs Desert Park), Tony Chan from Hong Kong, Lisa Russell from NZ, and Ian Marmion (Bushcare facilitator).

Left and above: Smoke germination demonstrations at the 1998 ANPC Conservation Techniques Course in Tasmania.

Research Roundup

- **Lloyd MV, Dixon KW & Sivasithamparam K.** (2000). Comparative effects of different smoke treatments on germination of Australian native plants. *Austral Ecology* **25**, p610 - 615.

Effectiveness of various smoke products (aerosol, smoke water, concentrated smoke products) in broad-scale landscape regeneration. Concentrated smoke products were found to be most effective in assisting germination, because of the lower rate of application required, and the increased species richness produced over untreated controls. Contact details for primary author:
mikelloyd@ozemail.com.au

- **Kenny, BJ (2000).** Influence of multiple fire-related germination cues on three Sydney *Grevillea* (Proteaceae) species. *Austral Ecology* **25**, p664 - 669.

Three Sydney species of *Grevillea*, were studied for the effects of several possible fire-related germination cues, such as heat, smoke and charcoal combustion products. Smoke had the greatest effect, but the presence of multiple germination cues may allow *Grevillea* species to maximise their survival following a fire.
Contact details: Belinda.Kenny@npws.nsw.gov.au

- **Coates, DJ & Atkins, KA (2001).** Priority setting and the conservation of Western Australia's diverse and highly endemic flora. *Biological Conservation* **97**, p251 - 263.

Highly informative and reader-friendly paper examining conservation issues at several scales. The need for prioritisation of resources when planning conservation and management strategies in Western Australia was identified as a key issue. The prioritisation process focussed on four different approaches, being single taxa, groups of taxa within geographic regions, populations and threatening processes. The conservation practices suitable for application in Western Australia may be best suited to a taxa level approach, given that the state has 46% of Australia's threatened flora, and 8% of the world's threatened and poorly described flora. The need for genetic conservation of some more common species was also addressed.

The need was stressed for a flexible and multivariate approach to conservation as biological knowledge of much of Western Australia's flora is often sparse, and this lack was identified as a major limiting factor. The taxa approach to conservation was deemed appropriate in this situation as having threatened 'umbrella' species legislative potential, consequently protecting other plant species in the area and raising public awareness. Translocation was also seen as a viable and important conservation process, especially for some of Western Australia's critically endangered taxa, compared to a broadscale approach taken for the arid zone and some northern areas. Contact for primary author:
davidc@calm.wa.gov.au

- **Grigg AM, Pate JS & Unkovich MJ (2000).** Responses of native woody taxa in *Banksia* woodland to incursion of groundwater and nutrients from bordering agricultural land. *Australian Journal of Botany* **48 (6)**, p777 - 792.

Examining effect of neighbouring agricultural land on 3 transect zones in *Banksia* woodland, ranging from paddock border through to bush. Diversity of native woody species increased in progression from paddock edge to bush, although the standing biomass decreased, and paddock borders had a higher nitrogen content. The dominant woody species (*Banksia prionotes*) had its highest percentage biomass representation in the paddock border. Contact details: alasdair@cyllene.uwa.edu.au

- Also of some interest is Pettit and Froend's paper on long-term changes in jarrah eucalypt woodland remnants (*Eucalyptus marginata*) following cessation of grazing. See *Austral Ecology* **26 (1)**, February 2001, p22 - 31.

Floral composition changes in eucalypt remnants following cessation of a 7-year grazing period. After an initial increase of exotic annuals from adjacent pasture, these were replaced by a long-term increase in native perennial species. Native species richness was estimated to return to normal after approximately six years, whilst regaining original levels of vegetation cover took longer. Primary author contact for this paper:
n.pettit@cowan.edu.au

The papers featured in this month's issue can be accessed online from the relevant journal as follows:

Biological Conservation: www.elsevier.com/locate/biocon

Austral Ecology: http://life.csu.edu.au/esa/esaaje.html

Australian Journal of Botany: www.publish.csiro.au/journals/ajb/

Publications and Information Resources

Threatened species of the Lower North Coast of New South Wales

Produced by the NSW National Parks and Wildlife Service, 2000

Covers non-woodys, shrubs, trees, as well as fauna and ecological communities (e.g. lowland rainforest on floodplains). Written with community-orientated conservation in mind, each species comes with a colour photograph, biological information, why it is threatened, and practical conservation action for that species. Would be ideal either as a field accompaniment in education, or as a reference. For further information contact the Threatened Species Unit, Conservation Programs & Planning Division, Northern Directorate, NSW National Parks and Wildlife Service, Locked bag 914, Coffs Harbour NSW 2450, Tel: 02 6651 5946.

The Western Australian Flora: A Descriptive Catalogue

Wildflower Soc. of WA, CALM, The Botanic Gardens and Parks Authority

This Western Australian flora guide does exactly what it says on the tin, and also includes naturalised alien species. A first for botanical publication in WA. Order from wildflowers@ozemail.com.au, or see: http://florabase.calm.wa.gov.au/catalogue.html.

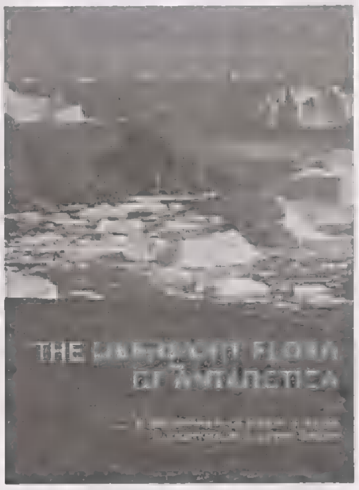
Contribution to an Evaluation of Tree Species Using The New CITES Listing Criteria

Compiled by The World Conservation Monitoring Centre.

Reprint August 2000. Available on the internet at http://www.unep-wcmc.org/species/tree_study/. Any comments to Gerardo Fragoso, Head of CITES and CMS programme. E-mail: gerardo.fragoso@unep-wcmc.org.

The Liverwort Flora of Antarctica

H. Bednarek-Ochyra, J. Vána, R. Ochyra and R.I. Lewis Smith



Published by the W. Szafer Institute of Botany in Poland, this book has achieved the remarkable task of putting together a comprehensive guide to the Antarctic bryoflora. A synopsis of the geological and climatic regimes of the Antarctic is followed by an informative history of hepaticological study on the continent, which is made exceptionally difficult by harsh climate, scattered distributions, and very limited periods where small areas are uncovered by snow and accessible. Systematics, diversity and ecology are treated very well considering the logistics of such a task, and each family is well-illustrated. A list is provided of each species' distribution, often covering hundreds of islands and areas, and a helpful glossary of terms should save much head-scratching for the non-specialist. Thoroughly recommended for an interesting read, and quite likely a godsend for Antarctic botanists. Available from the W. Szafer Institute of Botany, Polish Academy of Sciences, Ul. Lubicz 46, PL-31-512 Cracow, Poland.

E-mail: office@ib-pan.krakow.pl

Co-management of Natural Resources: Organising, Negotiating and Learning-by-doing

By G. Borrini-Feyerabend, M. Taghi Farvar, J.C. Nguinguri and V.A. Ndangang.

Produced for the Deutsche Gesellschaft fur Technische Zusammenarbeit (GTZ) and the IUCN Regional Office for Central Africa. With the emphasis on a practical approach, this book contains detailed information on all aspects of co-management processes. As a bonus, the book also includes hints gained from previous experience, references and suggestions for further research and reading. This publication is available online at: http://nrm.massey.ac.nz/changelinks/cmnr.html

(Source: Collaborative learning for environmental management: www.landcare.cri.nz/science/social/)

Genetics, Demography and Viability of Fragmented Populations

Edited by Dr A. Young of CSIRO Plant Industry, &
Dr G. Clarke of CSIRO Entomology

Research, case studies and management options from around the globe, including the endangered Australian Button Wrinklewort Daisy (*Rutidosis leptorrhynciodes*). More info from Sophie Clayton on sophie.clayton@pi.csiro.au.

Red List of Spanish Vascular Flora (Lista Roja de la Flora Vascular Española)

Conservación Vegetal Nov 2000, edited by Felipe Domínguez Lozano

The first ever Red List of Spanish endangered flora, includes over 400 plant species and input from 39 institutions. Although the book is predominantly Spanish with abbreviated English translation, endangered species are clearly set out by family and region, with the Balearics and Canary Islands also included. Lots of luscious colour photos too.

E-mail felipe.dominguez@uam.esfor more details.

National Local Government Biodiversity Survey: Executive Summary

Australian Local Government Association

Outlining the results of the Local Government Biodiversity Survey undertaken between 1999-2000, this report is Stage 1 of the NLG Biodiversity Strategy, adopted in 1998. In summary, the survey aimed to discover the number, impact and effectiveness of Local Government biodiversity conservation activities and programs at present. In short, what are Local Governments currently doing to conserve biodiversity? Herein lie some truly interesting statistics: did you know that 16% of councils in WA have incorporated biodiversity principles into their corporate plans? Did you also know that 82% of Local Governments are involved in regional partnerships with community groups? Available at
www.alga.com.au/bio_strategy.PDF,
e-mail alga@alga.com.au, or phone (02) 6281 1211.

Electronic Addresses

WA Wildflower site

Excellent photo catalogue of native WA plants. Comes complete with natural history summaries, and common/ botanical names. Recommended.
www.evolve.net.au/natives/

Jervis Bay and Illawarra rainforest wildflower images

Compiled by Michael Thompson of the Society for Growing Australian Plants

http://thunder.simplenet.com/wildf/jervis.htm
http://thunder.simplenet.com/wildf/illr.htm

New UNEP interactive environmental website

New forum for scientific and technical review of environmental management on: www/unep.net

Pacific Institute for Studies in Development, Environment, and Security bibliography - impacts of environmental change

www.pacinst.org/wildlife.html

'Hidden Forest'

Excellent guide to NZ fungi, lichens, slime moulds and bryophytes. Highly accessible, all species have biological information and photographs, includes tips on fungal foraying and links to other mycological sites.
http//hiddenforest.co.nz

Impact and use of firewood in Australia

Recently released report, the discussion paper is available for download (Australian & New Zealand Environment and Conservation Council)
www.ea.gov.au/firewood

Sydney's Bushland - More than meets the eye

Jocelyn Howell & Doug Benson, RBG Sydney

Written for a general readership, covers geology and climate, basic ecology and a guide to bushland areas. Published by the RBG Sydney, phone (02) 9231 8125.

The Australian Environment Directory

Hallmark Editions

A who's-who and who-does-what of the Australian Environment Sector, detailing Federal and State level structuring, environmental organisations and educational institutions. Promises to be an enlightening read. Place orders on: www.halledit.com.au.
ph: (03) 9555 7377, or fax (03) 9555 7599.

Conferences

Gardens 2001 Congress - Public Gardens in the 21st Century

Tuesday 17 to Sunday 22 April, Canberra, Australian Capital Territory.
Further information on (02) 6257 3299
Email: gardens2001@ausconvservices.com.au

29th Annual Conference - International Plant Propagators Society

Thursday 17 to Sunday 20 May, Canberra, Australian Capital Territory
For further info contact Francis Biggs on (02) 4571 1321 or Paul Carmen on (02) 6288 4208
Email: biggs@zeta.org.

Southern Hemisphere Marine Mammal Conference

May 28 - June 1 2001, Phillip Island Victoria
E-mail: 2001.mm.odyssey@penguins.org.au
Internet: www.penguins.org.au/conference
Ph: (03) 5951 2800

3rd International Canopy Conference

June 2002, Cairns QA
For more information see:
www.premiers.qld.gov.au/whatsnew.htm
Ph: (07) 3224 2055

Fungimap Inaugural National Conference

22 - 26th June 2001, Denmark WA
Internet: www.denmarkwa.net.au/~environ
Email: fungidenmarkwa@wn.com
Ph: (08) 9848 1644

Planning for Remnant Vegetation Conservation in Urban Areas

21 - 22 June, St Leonards
Nature Conservation Council. Contact Samantha Newton (Urban Bushland Project Officer).
E-mail: snewton@nccnsw.org.au

Local Government Salinity Summit

July, Echuca-Moama. Organised by the Murray Darling Association. Tel: (08) 8226 0582

Society for Conservation Biology 15th Annual Meeting

July 29 - August 1, 2001, University of Hawaii. Internet: www.uhh.hawaii.edu/~scb/
Ph: 808-967-7396 ext 232

Courses/workshops/field work

Guided Walks 'Biodiversity Highlights of Waite Conservation Reserve'

6th May 2pm - 11th May 2pm
Waite Conservation Reserve, Adelaide Uni, SA
E-mail: jennifer.gardner@adelaide.edu.au

Celebration of Biodiversity, Warringah

6th May 2001, 10am, Beacon Hill Community Centre, NSW. Biodiversity preservation, bushland regeneration, native plant propagation. Contact Judith Bennett, educ.sydney@npansw.org.au

Living in a Biodiverse world, University of Tasmania

7th May 9am - 11th May 3pm
Contact: Michaela Patel
E-mail: Michaela.Patel@utas.edu.au

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conferences continued...

USDA Forest Service International -International Seminar on Protected Area Management

August 9 - 25, 2001, University of Montana
Internet: http://www.fs.fed.us/global/is/ispam/welcome.htm. Or contact Dr JA Burchfield on e-mail: jburch@forestry.umt.edu
Ph: (406) 243 6650

USDA Forest Service International-17th International Seminar - Forest & Natural Resources Management

August 26 - Sep 13, 2001, Colorado State University
Internet: http://www.fs.fed.us/global/is/isfam/welcome.htm Ph: (970) 482 8098

First International Orchid Conservation Congress

September 24 - 28, 2001, Hyatt Regency, Perth, Western Australia
Internet: www.bgpa.wa.gov.au/OrchidCongress/OrchidCongress.html Ph: (08) 9322 6906

Ecological Society of Australia Annual Conference 2001, Wollongong

26-28 September, University of Wollongong, NSW
Contact Rob Whelan (Dept of Biol. Science, Uni of Wollongong). E-mail: rob_whelan@uow.edu.au

7th World Wilderness Congress

September - October 2001, South Africa.
Email: info@worldwilderness.org

Regional Groups

NSW South West Slopes Region

Paul Scannell, Albury Botanic Gardens

Murray Catchment Management Board Targets

It's an exciting time in the Murray Catchment with targets being finalised, for the management of remnant habitat and revegetation projects to establish corridors and sustainable agriculture.

Community consultation has been carried out across the catchment and the input and feedback from the community has been very encouraging. The targets will be adopted in March.

This will enable all land managers to begin planning for future projects.

Crimson Spider Orchid Recovery Plan

The germination trials of seed at King's Park and Botanic Gardens, in Perth, W.A. have begun with the mycorrhizal associate being built up for *Caladenia concolor*, and this will be used to germinate the 5% of seed from a single capsule. These plants, if successful, will become the backup and may be hand pollinated to obtain seed for possible reintroductions.

Similar trials with the Little Pink Spider-Orchid *(Caladenia rosella)* at RBG Melbourne have shown increasing success and this information will be invaluable. Seed has been scattered around the existing populations and numbers have increased.

Stephen Clark from NPWS met with stakeholders in Albury, to comment on the Bushfire management plan for our region. Threatened species habitats were discussed and included in the detail for the plan.

The Recovery Plan will be finalised within the next few months and the website address will be in the next issue of Danthonia.

Photo: Paul Scannell (Calocilus robertsonii)

NHT projects

It's a busy time of the year with many projects being put forward for funding through NHT. The region is lucky to have so many wonderful community groups working on great projects. Many of these projects will have great outcomes for the conservation of our regional flora and fauna.

The Billabong Creek Renaissance project and the Rebirding of Holbrook to mitigate dieback project are two large projects that will make great models for future actions, in our heavily cleared region.

Paul Scannell, Regional Coordinator NSW South West Slopes Region

Ph: (02) 6023 8769 Fax: (02) 6041 6527

E-mail: accgardn@albury.net.au

Internet: www.albury.net.au/~accparks

Photo: Paul Scannell

Sydney Region Report - Retrospective

Tracey Armstrong, Mount Annan Botanic Gardens

I attended the first conference 'Protective Custody – ex situ conservation in Australia' in Canberra in 1991 and I was struck and inspired by the concern for rare or threatened native plants which was exhibited by such a wide range of people. People from Botanic Gardens, the Australian Plant Society, National Parks and Wildlife Services, universities, land holders, and local governments to name just a few. The building blocks of a network were already in existence, it only needed the drive of Mark Richardson and Lyn Meredith to connect it all together as the ANPC.

As a result of the conference, Mount Annan Botanic Garden which is the native plant Garden for the Royal Botanic Gardens, Sydney, volunteered to host the Sydney Regional Group which is how I came to be Co-ordinator.

continued from page 17

Since that conference, I've seen the emphasis of plant conservation shift from ex situ conservation in the hands of government organisations to in situ and plant community conservation with much greater community input and participation. I believe this change in focus is a positive one as taking responsibility as a community means the environment has a much better chance of surviving.

The Sydney Region has regular activities throughout the year from Newcastle to Wollongong and out to Blackheath to try and accommodate as many members as possible and to also provide interest for those members who are keen to travel a little. Over the years we have covered many species, sites, and general topics including fungi and other cryptogams, rare orchids, endangered ecological communities, and Bushcare to name just a few. This wide range of themes has come mainly from the members themselves, which has made my job much easier – 100 minds thinking up interesting ideas instead of just me spinning like a top.

One of the joys of the ANPC is this group-mind, so many people interested in similar things, but with myriad different slants and areas of expertise, we are a great resource for each other and for other individuals or organisations (and we're free with ANPC membership!). The connection of 'people with a problem' with 'people with an answer' is one of the most satisfying components of my job as Co-ordinator, it's a real blast to be able to help.

So what's on for the future? I'm planning on the Sydney Group having many more years of connecting with people both inside and outside the Network, to everyone's benefit.

Tasmanian Region

Contact: Andrew Smith,

Parks and Wildlife Service, Tasmania.

Ph: (03) 6233 2185, Fax: (03) 6233 8308

Email: andrews@dpiwe.tas.gov.au

Tracey Armstrong, ANPC Sydney Group Regional Coordinator

Mount Annan Botanic Garden, Mount Annan Drive,
Mount Annan NSW 2567

Ph: (02) 4634 7939

E-mail: Tracey_Armstrong@rbgsyd.gov.au

HAVE YOUR SAY ABOUT THE ANPC

The ANPC is being reviewed with respect to its Natural Heritage Trust / Endangered Species Program funding from Environment Australia

Members are encouraged to have their say and can contact the reviewer
Catherine Potter on: (02) 6257 0427
email: cathpotter@hotmail.com.

Copies of the review scopes can be obtained by contacting the ANPC National Office.

Are You Networked for Plant Conservation?

The new ANPC plant conservation email list is going from strength to strength with over 200 subscribers already and much positive feedback. Add your name to the list to hear about plant conservation initiatives at home and overseas, grant application deadlines, positions vacant, conferences, workshops, fieldwork, etc. and to exchange plant conservation information with others.

To subscribe, unsubscribe or post a message, send an email to: anpc@anbg.gov.au

And finally....

- One of the ANPC's objectives is to encourage and promote the writing of Recovery Plans, for either individual species, communities or ecosystems. To enable us to address this objective, we would like to hear from anybody involved in the production of Recovery Plans, to help us achieve our aim of building up a small reference base for use by staff and members.

Ideally we would like to have some copies of completed Recovery Plans, although plans at the Draft or Public Comment stage would also be extremely useful, to facilitate discussion and comment by ANPC members. Any interested parties can telephone the National Office on (02) 6250 9509, or contact by e-mail on: anpc@anbg.gov.au.

- Last but not least, a call for ideas regarding ANPC Master Workshops. We are keen to hear ideas and comments for general topics, course content etc. from members, and if anybody wishes to air their views or brainwaves, contact details are as above. Ideas can also be submitted by letter to: ANPC Inc., GPO Box 1777, Canberra ACT, 2601.

The Australian Network for Plant Conservation Inc. Membership List

The date in brackets indicates that the member has joined or renewed for that year. Addresses and names of contact persons are available from the National Office. *Note:* Memberships are valid for the calendar year.

Corporate Members

ACT Parks and Cons. Service, ACT (1998)
Adelaide Botanic Gardens, SA (2001)
Albury Botanic Gardens, NSW (2000)
Alcoa of Australia Ltd., WA (2000)
Australian National Botanic Gardens, ACT (2000)
Aust Tree Seed Centre (CSIRO), ACT (1999)
Biodiversity Group, Environment Australia, ACT (<1997)
Brisbane Botanic Gardens, Qld (1999)
Centre for Mined Land Rehabilitation, Qld (2001)
Centre for Plant Biodiv Rsch, ACT (2000)
Centre for Plant Conservation Genetics, NSW (2000)
Coffs Harbour City Council, NSW (2001)
Council of the City of Orange, NSW (2000)
CSIRO Publishing, Vic (2000)
Defence Estate Organisation, ACT (1998)
Dept of Conservation and Land Management, WA (2000)
Environment ACT, ACT (1999)
Eurobodalla Native Bot. Grdens, NSW (1999)
Flecker Botanic Gardens, Qld (2000)
Forestry Tasmania, Tas (1999)
Gladstone Tondoon Botanic Gardens, Qld (1998)
Kings Park and Botanic Gardens, WA (1998)
Logan City Council, Qld (1998)
Macedon Ranges Shire Council, Vic (1999)
Maroochy Shire Council, Qld (2000)
Minerals Council of Australia, ACT (1999)
Mount Tomah Botanic Garden, NSW (1998)
North Forest Products, Tas (1998)
NSW National Parks & Wildlife Service, NSW (2001)
Olympic Co-ordination Authority, NSW (1998)
Pacific Power, NSW (2000)
Parks and Wildlife Commission, NT (2001)
Parks Australia-North, Christmas Island, (1999)
Qld Parks and Wildlife Service, Qld (2001)
Queensland Herbarium, Dept of Environment & Heritage, Qld (2001)
Randwick Council Depot, NSW (1998)
Redland Shire Council, Qld (2001)
RGC Mineral Sands Limited, WA (1998)
Roads and Traffic Authority NSW, NSW (2000)
Royal Botanic Gardens Melbourne, Vic (2001)
Royal Botanic Gardens Sydney, NSW (2001)
Royal Tasmanian Botanical Gardens, (2000)
Standing Committee on Forestry, ACT (1999)
Strathfield Municipal Council, NSW (2000)
Tasmanian Parks & Wildlife Service, (1999)
The Arid Lands Botanic Garden, SA (2001)
Townsville City Council, Qld (1999)
WMC Olympic Dam, SA (2000)
Wollongong Botanic Garden, NSW (2000)
Zoological Parks and Gardens Board of Victoria, Vic (2001)
Zoological Parks Board of NSW, NSW (2000)

International Associates

Canada

Canadian Botanical Conservation Network
Rare Plant Consortium

Fiji

Suva City Council
The South Pacific Regional Herbarium

Germany

Botanischer Garten und Botanisches

India

Indian Society for Conservation Biology

Indonesia

Botanic Gardens of Indonesia (Kebun Raya)
Eka Karya Botanic Garden
Indonesian Network for Plant Conservation

New Zealand

Auckland Plant Collections Network
Wellington Plant Conservation Network
Schl of Environmental & Marine Sciences

Solomon Islands

The Herbarium & Botanical Garden, Forestry Division

Sri Lanka

Zackeriya Mohamed Zarook

South Africa

John Donaldson (2001)
National Botanical Institute
SABONET

Switzerland

Conservatoire et Jardin Botaniques

UK

Royal Botanic Gardens Kew
Center for IUCN/Species Survival Com.Office
PlantNet
Botanic Gardens Conservation Intl

USA

Centre for PlanrConservation
Columbus Zoo (1998)
Don Falk
ECO-SEA
Georgia Endangered Plant Stewardship Network
Missouri Botanical Garden Library

Western Samoa

Vailima Botanic Gardens

Other Organisations

ARAZPA Inc, NSW (2000)
ASGAP, Qld (2001)
Aust. Assn of Bush Regenerators NSW (2000)
Australian Inland Botanic Gardens, Vic (1998)
Australian Plant Society Nrthn Grp Tas (2000)
Aust. Plant Soc Newcastle Grp NSW (2000)
Aust. Plants Soc. Cent. West Grp, NSW (1999)
Aust. Plants Soc SW Slopes Grp NSW (2000)
Australian Plants Society NSW (1999)
Aust. Trust for Conservation Volun, Vic (1997)
Blue mntns wildplant rescue Srvce, NSW (1999)
Brunswick Valley Heritage Park, NSW (2000)
Burnley College, Vic (1999)
Burrendong Arboretum, NSW (1999)
Canberra and South-East Region Environment Centre, ACT (1997)
Community Biodiversity Network, NSW
Dept Land & Water Cons'tion, NSW (2001)
Friends of Eurobodalla Regional Botanic Gardens, NSW (2000)
Friends of Grasslands, ACT (2000)
Friends of the ANBG, ACT (2001)
Friends of the North Coast Regional Botanic Garden, NSW (1999)
Friends of Warrandyte State Park, Vic (1998)
Greening Australia (ACT & SE NSW) (1999)
Greening Australia (NSW) (2001)
Greening Australia (SW Slopes), NSW (1999)
Greening Australia - SW Plains, NSW (1999)
Greening Australia Ltd, ACT (1999)
Greening Australia Victoria Inc., Vic (1997)
Hunter Reg. Botanic Gardens, NSW (2000)
Indigenous Flora & Fauna Assn, Vic (2000)
Lismore Rainforest Bot Gardens, NSW (2000)
Merri Creek Management Comm., Vic (2000)
Monarto Zoological Park, SA (2000)
Myall Park Botanic Garden Ltd., Qld (1998)
NSW Roadside Environment Comm, (1999)
Olive Pink Botanic Garden, NT (2001)
Pangarinda Arboretum Comm, SA (2000)
Parks and Leisure Australia, Vic (1998)
Royal Geographical Society of Qld, (1999)
Royal Zoological Society of SA (2000)
SGAP (North Shore Group), NSW (2000)
SGAP - Canberra Region Inc., ACT (2001)
SGAP - Dryandra Study Group, WA (2001)
SGAP - Ipswich Branch, Qld (2000)
SGAP Far North Coast Group, NSW (1998)
SGAP North West Group, Tas (1998)
SGAP NSW Ltd - Blue Mountains Grp, (2000)
SGAP Warringah, NSW (2001)
SGAP - Queensland Region (2000)
Stony Range Flora Reserve, NSW (1999)
Tasmanian Arboretum Inc, (1999)
Threatened Species Network, (<1997)
Trust for Nature (Victoria), Vic (1999)
Understorey Network Inc, Tas (1998)
Wallum Action Group Inc, Qld (1997)
Wildflower Soc of WA, Nth suburbs (2001)
Wildflower Society of WA Inc (2000)
Wildlife Preservation Soc of Aust NSW (1999)
WWF For Nature (Melb), Vic (1997)
WWF for Nature Australia, NSW (1999)

Individual Members

Gail Abbott, NSW (1998)
Dr David Aldous, Vic (1998)
Jan Allen, NSW (2000)
Ian Anderson, ACT (2001)
Benjamin Armstrong, NSW (1999)
Richard Arnett, NSW (1998)
N Ashwath, Qld (1999)
Greg Bain, Vic (1998)
Katherine Baker, Qld (2000)
B & B Barker, Vic (1999)
Tim Barlow, Vic (1999)
Robert Barnes, NSW (1999)
Douglas Beckers, NSW (1998)
Brett Beecham, WA (1999)
Margaret Bell, NSW (1998)
Stephen Bell, NSW (2001)
John Benson, NSW (2000)
Dr Leone Bielig, Qld (2001)
Robert Blackall, NSW (1998)
Dr Robert Boden, ACT (2000)
Elizabeth Boesel, NSW (1999)
Dr Barbara Briggs, NSW (2000)
Dr A.H.D. Brown, ACT (2000)
Dianne Brown, NSW (2001)
Douglas Brown, Tas (1998)
Evelyn Buckley, NSW (1999)
Louise Bull, NSW (2001)
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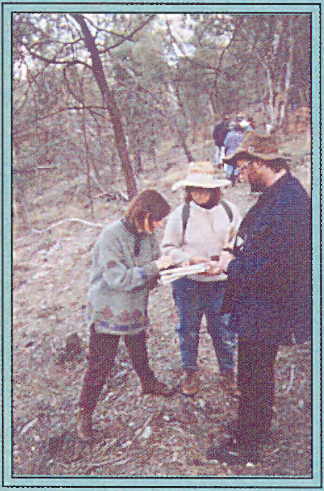
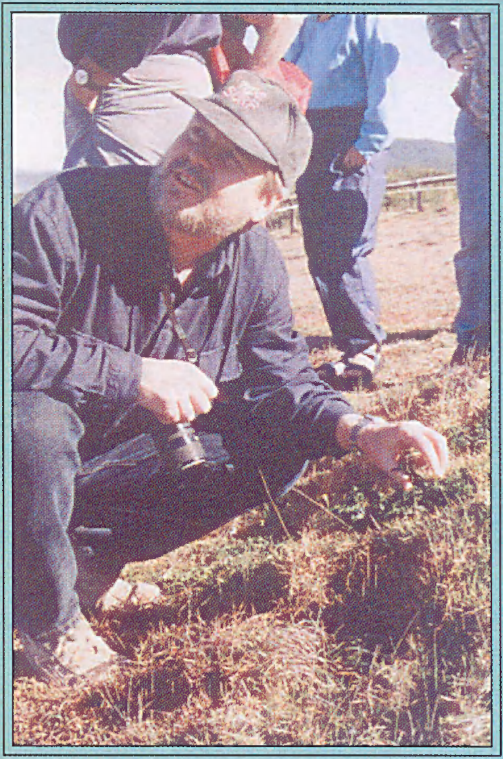


Left: NSW Central West Slopes regional group field trip to a remnant woodland.

Right: John Zwar, Industry Representative on the ANPC Committee, WMC Olympic Dam nursery.

Left: National Coordinator represented ANPC at the IUCN Oceania Regional Meeting, Gerringong NSW (Front Row, 2nd from Right).



Left: Dr Manfred Jusaitis, field trip to Zieria prostrata *site, 1997 Conference.*

Right: Jeanette Mill, ANPC National Coordinator, & Chris Willis, Coordinator of Southern African Botanical Diversity Network, sign a memorandum of understanding.

Below: L to R, David Galbraith, Canadian Botanical Conservation Network, Edelmira Linares, UNAM Mexico, Jeanette Mill, Brien Meilleur, Center for Plant Conservation. 1998 Botanic Gardens Conservation Congress

Right: Cryostorage of threatened flora - Darren Touchell, formerly of the Botanic Gardens & Parks Authority, WA.